July 2019

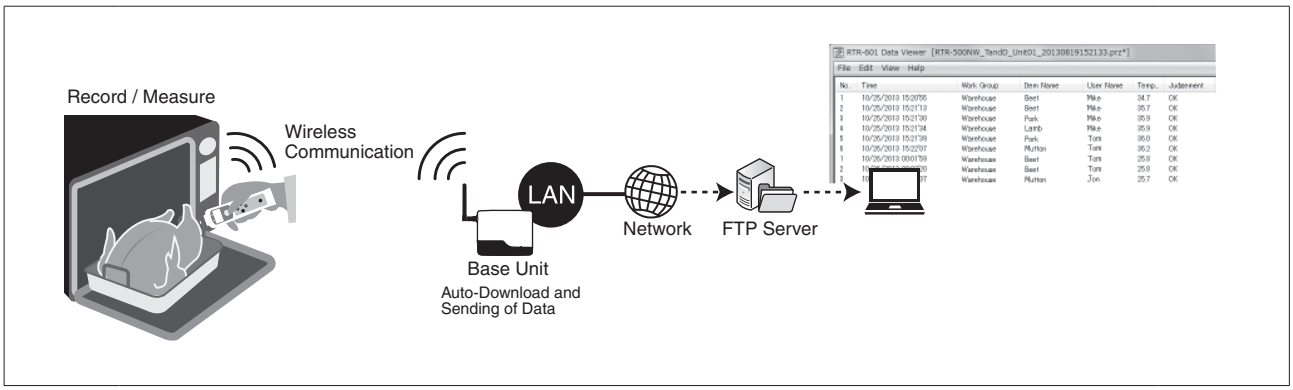
Wireless Core Temperature Data Logger

RTR-601 Series Features and Specs

Measurement Items	Data Collection	Data Access	Warning Notification
Food Core Temperature	RTR-500AW RTR-500NW	T&D WebStorage Service / Internet / Intranet	None

This wireless core temperature data logger is an easy yet effective way to track temperature and ensure safety for foods and liquids. One press of the REC button logs all your measurement data: temperature, time of measurement, user, item, and judgment result. The recorded data can then be automatically collected and sent to an FTP server.

(Currently only US/FCC model available)



One-Push Simple Recording

One press of a button logs all your measurement data: temperature, time, user, item, and judgment result.

Waterproof and Oil Resistant Design

It is designed to be submersible with an IP68 rating and has a oil-tough construction.

Two Types to Choose From

There are two types of temperature sensor: a straight rod type sensor (one-piece unit) and a cable-to-grip type sensor (easy to measure temperature in steam).
Each type comes in two lengths: a shorter one with a sharp tip for stabbing food and a longer round tipped one.

Collect Data with RTR-500NW/500AW

Recorded data can be periodically collected by an RTR-500NW/500AW unit via wireless communication, and automatically sent to an e-mail or FTP server. It is also possible to manually download data directly to a PC.

Specialized Non-Contact Charging System

The separately sold battery charge dock (RTR-6BD) can simultaneously charge two units. At a full charge the units can run continuously for 24 hours.

* For making settings USB communication can also be used. However, the battery cannot be charged by USB bus power.

Upper and Lower Limit Warnings

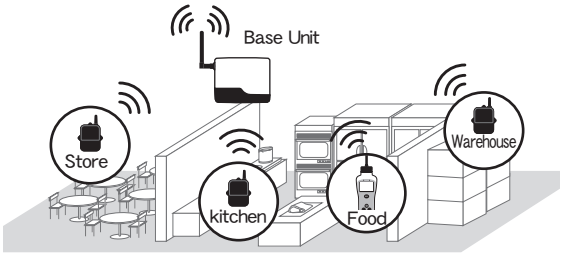
If a measurement exceeds a set limit the red lamp will light up on the main unit.

Registration of Measurement Items and Users

The supplied software makes it easy to register measurement items and users, as well as, create work groups.

Use with RTR-500 Series Data Loggers

The RTR-601 can be used in conjunction with data loggers in the RTR-500 Series to create a management system for tracking overall temperature during all phases of food preparation; and all with just one Base Unit.



When using RTR-500NW/500AW as the Base Unit, data will be output in XML format to be sent to the designated FTP server. The specifications for XML are available free of charge so that you can create a system to meet your needs. Communication specifications for RTR-500NW/500AW and RTR-500 are also available free of charge. It is possible to create controls within your own system for gathering data and refreshing the item tables. Please contact your local distributor for details about these specification documents.

RTR-601 Series Specifications

	RTR-601-110 / 130 / E10 / E30
Measurement Channels	Temperature 1ch
Sensor	Platinum Resistance (Pt1000)
Measurement Units	°C, °F
Measurement Range	−60 to 250°C
Accuracy	±0.5°C at −10 to 150°C ±1.0°C at −60 to -10°C, 150 to 250°C
Measurement Resolution	0.1°C
Responsiveness	Thermal Time Constant: Approx. 12 sec. (in air) Approx. 2 sec. (in agitated water) Response Time (90%): Approx. 60 sec. (in air) Approx. 3 sec. (in agitated water)
Measurement / Display Interval	0.5 sec.
Recording Items	Temperature, Measurement Time, User, Item, Judgement Result
Logging Capacity	1,800 readings
Recording Mode	Endless (Overwrite oldest data when capacity is full)
LCD Display Items	Temperature, Current Date/Time, User, Item, Battery Level, etc.
Communication Interfaces	Short Range Wireless Communication FCC Part15 Section247 / IC RSS-210 Frequency Range: 902 to 928MHz, RF Power: 7mW
Wireless Transmission Range	Approx. 50 meters if direct and unobstructed
Communication Time	Data Download Time between RTR-601 and Base Unit: Approx. 2 min. (for 1,800 readings) The same amount of time will be necessary for each Repeater.
Power	Two included AAA Ni-MH batteries (Non-Contact Charging System) (*1)
Battery Life	Approx. 24 hours (for Continuous Operation with Backlight Always ON)
Dimensions	H 165 ㎜ × W 49.8 ㎜ × D 37 ㎜ Sensor Length: Short type 135 ㎜, Long type 310 ㎜ Cable Length: 900 ㎜
Weight	RTR-601-110 (Short Sensor) Approx. 135 g RTR-601-130 (Long Sensor) Approx. 150 g RTR-601-E10 (Cable Type Short Sensor) Approx. 185 g RTR-601-E30 (Cable Type Long Sensor) Approx. 200 g
Operating Environment	−10 to 60°C
Waterproof Capacity	IP68: Submersible
Accessories	User's Manual (Warranty Included)
Compatible Base Units / Repeaters	Base Units: RTR-500NW / 500AW, RTR-500 (*2) Repeater : RTR-500

	RTR-6BD -Battery Charge Dock (required)
Compatible Devices	RTR-601 Series Data Loggers
Power	AC Adaptor AD-05A3
Input Voltage	5V 2A
Communication Interface	USB Communication for setup
Charging Method	Electromagnetic Induction Type Non-Contact Charging System
Charging Time (*3)	Approx. 70 min.
Charging Current	700mA (typical) per Remote Unit
Dimensions	H 189 ㎜ x W 136 ㎜ x D 44.3 ㎜ (including protrusions)
Weight	Approx. 330 g
Operating Environment	Temperature: 0 to 40°C Humidity: 90%RH or less (no condensation)
Accessories	AC Adaptor AD-05A3, USB Mini-B Cable US-15C, Wall Mount Screw x 3, User's Manual Set (Warranty Included)

*1: A Battery Charge Dock (RTR-6BD) needs to be purchased separately.
*2: Customers wishing to use the RTR-500 as a Base Unit, please contact your local distributor for the communications protocol specifications to write your own software.
*3: This is the estimated time to complete a full charge after the battery charge warning message appears.If the body of the Remote Unit gets hot and battery charging temporarily stops, the charging time will be longer.
The specifications listed above are subject to change without notice.The specifications listed above are subject to change without notice.